

Title (en)

METHOD AND CIRCUIT ARRANGEMENT FOR RECOGNISING LOAD COILS

Title (de)

VERFAHREN UND SCHALTANORDNUNG ZUM ERKENNEN VON PUPINSPULEN

Title (fr)

PROCEDE ET CIRCUIT POUR RECONNAITRE LA PRESENCE DE BOBINES DE CHARGE

Publication

EP 1512269 B1 20060614 (DE)

Application

EP 03727492 A 20030521

Priority

- DE 10226348 A 20020613
- EP 0305333 W 20030521

Abstract (en)

[origin: WO03107639A1] The invention relates to a method and a circuit arrangement for recognising loaded coils in a telecommunication line. Periodic transmission symbols are transmitted by a transmitter (2, 4, 5) in order to recognise the load coils. An analog received signal is received by a receiving device (3, 6), which is then scanned and further processed. The frequency response of the received signal is determined for a predetermined number of frequency points in a predetermined frequency range, a function having function values ($F(\cdot, l)$) is calculated from the real part and the imaginary part of the frequency response of the received signal and a differential vector ($\langle r_i \rangle$) is determined from the function values ($F(l)$) by a calculating unit (11, 12, 13, 14, 15). A criterion is derived from the components of the differential vector ($\langle r_i \rangle$) which indicates whether a load line is present.

IPC 8 full level

H04B 3/03 (2006.01); **H04M 3/30** (2006.01); **H04B 3/46** (2006.01); **H04L 25/02** (2006.01)

CPC (source: EP KR US)

H04B 3/46 (2013.01 - EP US); **H04M 3/26** (2013.01 - KR); **H04M 3/30** (2013.01 - EP US); **H04L 25/022** (2013.01 - EP US);
H04M 3/2209 (2013.01 - EP US); **H04M 3/305** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 03107639 A1 20031224; CN 1545795 A 20041110; DE 10226348 A1 20040115; DE 50303848 D1 20060727; EP 1512269 A1 20050309;
EP 1512269 B1 20060614; JP 2005520461 A 20050707; KR 100597841 B1 20060706; KR 20040045422 A 20040601;
US 2004208250 A1 20041021

DOCDB simple family (application)

EP 0305333 W 20030521; CN 03800823 A 20030521; DE 10226348 A 20020613; DE 50303848 T 20030521; EP 03727492 A 20030521;
JP 2004514316 A 20030521; KR 20047002199 A 20030521; US 76633804 A 20040128